PROGRAM ANNOUNCEMENT

THE DEPARTMENT OF DEFENSE (DoD)
FISCAL YEAR 2009
DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM (DURIP)

AFOSR-BAA-2008-5

FULL PROPOSAL DEADLINE:

Must be received no later than 4:00 PM Eastern Daylight Time Tuesday, 26 August 2008

Army Research Office

Office of Naval Research

Air Force Office of Scientific Research

in cooperation with the Office of the Deputy Under Secretary of Defense for Laboratories and Basic Sciences

OVERVIEW INFORMATION

- **Agency Name(s)** This Department of Defense program will be administered through the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR).
- Funding Opportunity Title Fiscal Year 2009 Defense University Research Instrumentation Program (DURIP).
- **Announcement Type** This is the initial announcement.
- **Funding Opportunity Number** AFOSR-BAA 2008-5.
- Catalog of Federal Domestic Assistance (CFDA) Number(s) 12.300, Basic and Applied Research (ONR); 12.431, Basic Scientific Research (ARO); and 12.800, Air Force Defense Research Sciences Program (AFOSR).
- **Dates** Proposals are due 4:00PM Eastern Daylight Time, 26 August 2008.
- Additional Overview Content The Department of Defense (DoD) announces the Fiscal Year 2009 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as "universities") to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment.

I. Funding Opportunity Description

The Department of Defense (DoD) announces the Fiscal Year 2009 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as "universities") to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment.

This announcement seeks proposals to purchase instrumentation in support of research areas of interest to the DoD, including areas of research supported by the administering agencies. The research areas of interest for the administering agencies are available on-line at the following addresses:

Army Research Office:

http://www.aro.army.mil/ (select "For the Researcher" and then "Funding Opportunities")

See BAA W911NF-07-R-0003 U.S. Army Research Office BAA FY 2007 - 2011

Office of Naval Research:

http://www.onr.navy.mil/ (select "ONR Science and Technology Departments") (Refer questions about appropriate program managers to contact to Dr. Bill Lukens, 703-696-4668)

Air Force Office of Scientific Research:

http://www.wpafb.af.mil/AFRL/afosr/ (select "Main Areas of Interest - Research")

For detailed information regarding technical goals, potential proposers are advised to refer to the announcements cited above and may contact DoD program managers listed therein to explore mutual interest before submitting proposals. A proposal may be submitted to more than one agency; however, only one award will be given.

A central purpose of the DURIP is to provide equipment to enhance research-related education. Therefore proposals must address the impact of the equipment on the institution's ability to educate students, through research, in disciplines important to DoD missions.

II. Award Information

Through this DURIP competition, the DoD intends to award approximately \$40 million for FY 2009, subject to the availability of funds. These funds will be awarded via grants made by ARO, ONR, and AFOSR (hereafter referred to as "agencies"). Grants will be for the purchase of research equipment costing \$50,000 or more, for items that typically cannot be purchased within the budgets of single-investigator awards. With very few exceptions (see section III.3.b) an individual award may not exceed \$1,000,000 in

DoD funding. In FY 2008, 210 awards totaling \$49.3 million were made. Awards ranged from approximately \$50,000 to \$950,000 averaging \$235,000.

Sufficient funds are not available to meet all of the instrumentation needs of the universities. Awards, therefore, will be made to universities conducting, or demonstrably capable of conducting (with the proposed new equipment), research in areas of interest to the DoD.

DURIP awards are typically one year in length.

III. Eligibility Information

1. Eligible Applicants – This competition is open only to accredited U.S. institutions of higher education with degree granting programs in science, mathematics and/or engineering.

Proposals are encouraged from Historically Black Colleges and Universities and Minority Institutions (HBCU/MI), as defined by 10 U.S.C. 2323. Accredited U.S. postsecondary institutions that meet the statutory criteria for identification as minority institutions are listed at the following Department of Education web site: www.ed.gov/about/offices/list/ocr/edlite-minorityinst.html. However, no funds are specifically allocated for HBCU/MI participation.

2. Cost Sharing or Matching – Cost sharing is not required.

3. Other –

a. **Types of instrumentation.** DURIP funds will be used for the acquisition of major equipment to augment current or develop new research capabilities to support research in the technical areas of interest to the DoD. Individual proposals may request funding for more than one item of equipment if the requested items of equipment comprise a "system" that is used for a common research purpose. Proposals for purely instructional equipment are not eligible. General-purpose computing facilities are not appropriate for DURIP funding, but requests for computers for DoD-relevant research programs are appropriate.

b. Amount of requested DoD funding.

General. With very few exceptions, a DURIP award will provide between \$50,000 and \$1,000,000 of DoD funding for the acquisition of instrumentation.

Exceptions. An institution may submit a proposal to purchase instrumentation costing more than \$1,000,000 under either of the following two conditions:

- The proposal includes a firm commitment from the institution submitting the proposal for the balance of the funds needed to purchase the instrumentation, so that the cost to the DoD remains at or below \$1,000,000; or
- In the proposal it submits, an institution requests that the agency receiving the proposal grant an exception to the \$1,000,000 maximum amount of DoD funding. At its discretion, the agency may consider a proposal for an amount in excess of \$1,000,000 if warranted by a critical, priority defense research need. However, as exceptions for awards of this size are expected to be rare, it is strongly recommended that a potential proposer communicate with the sponsoring agency before submitting a formal proposal requesting an amount in excess of \$1,000,000.

See also funding restrictions described in Section IV.5. There are no limits to the number of applications an applicant may submit.

IV. Application and Submission Information

1. Address to Request Application Package – Application forms and instructions are available at Grants.gov. To access these materials, go to http://www.grants.gov, select "Apply for Grants", and then select "Download Application Package". You may search by Agency by entering the CFDA number for the agency to which you are directing your application. CFDA Numbers for the agencies are as follows: 12.300, Basic and Applied Research (ONR); 12.431, Basic Scientific Research (ARO); and 12.800, Air Force Defense Research Sciences Program (AFOSR). (You may also search by the funding opportunity number for this announcement, AFOSR–BAA-2008-5.) Follow the prompts to download the application package.

Paper copies may be obtained by writing to AFOSR/PIE, 875 North Randolph Street, Suite 325, Room 3112, Arlington, VA 22203, or by FAX (703) 696-7320, or by emailing to afrl.uri@afosr.af.mil.

2. Content and Form of Application Submission –The DoD is interested primarily in the research and related science and engineering education that the equipment would facilitate. For this reason, the proposal must adequately describe the goals of the research and research-related education, so that judgments can be made on relevance to DoD goals.

The proposal may be submitted either electronically or in hard copy form, but not both. A complete proposal consists of these elements:

- The SF-424 (R&R) form as the cover page;
- The SF-424 (R&R) Research and Related Budget form;
- The SF-424 (R&R) Research and Related Other Project Information form
- The project abstract and project narrative, which are attachments to the SF-424 (R&R) Research and Related Other Project Information form;

- The SF-LLL form if the proposer has lobbying that it is required to disclose under 31 U.S.C. 1352, as implemented by the DoD at 32 CFR part 28; and
- -The SF-424 (R&R) Research and Related Project/Performance Site Location(s) form.

The following paragraphs provide details concerning these elements.

SF 424 (**R&R**) – The SF 424 (**R&R**) form is to be used as the cover page for all electronic and hard copy proposals. No other sheets of paper may precede the signed SF 424 (**R&R**) for a hard copy proposal. Complete all the required fields in accordance with the "pop-up" instructions on the form and the following instructions for the specified fields. To activate the instructions, turn on the "Help Mode" in Grants.gov. (The "Help Mode" is turned on by the icon with the pointer and question mark. This is located at the top of the form). The completion of the fields is self-explanatory.

Field 2: The Applicant Identifier may be left blank.

Field 3: The Date Received by State and the State Application Identified are not applicable to research.

Field 7: Complete as indicated. If the organization is a Minority Institution, select "Other" and under "Other (Specify)" note that you are a Minority Institution (MI).

Field 8: Complete fields as indicated. If the proposal is being submitted to other DURIP participating agencies, please state in the third area of this field, the name(s) and phone number(s) of the Point(s) of Contact at those agencies. If you run out of space in Field 8, include an attachment to R&R Other Project Information form in Field 11, naming the document "Continuation of SF 424 (R&R) Field 8."

Field 9: This field is pre-populated in grants.gov by the name of the Agency from which the application package was retrieved.

Field 17: Choose 'No'. Check 'Program is Not Covered By Executive Order 12372'.

Field 18: By completing and submitting the SF 424 (R&R), a proposer is providing a certification regarding lobbying that is required by law (13 U.S.C. 1352, as implemented by the DoD at 32 CFR Part 28). The full text of this certification may be found at

http://www.wpafb.af.mil/shared/media/document/AFD-070817-127.pdf or a copy will be provided upon request.

R&R Research and Related Budget Form - Include a budget that identifies equipment to be purchased, cost per item and total cost. Indicate the proposed source of the equipment. Include the name and phone number of a contact at that source or a website address listing the equipment and price. All equipment being requested must be considered part of one "system" costing more than \$50,000, and thus all equipment being purchased must be exempt from indirect costs. The budget must make clear how DURIP funding will affect the successful and complete purchase of the requested

equipment. Relevant information includes details of any other federal funds to be used and any funds to be contributed by nonfederal sources toward the purchase of the instrumentation. For budgeting purposes, presume a grant start date of 15 April 2009, although this is subject to negotiation.

R&R Other Project Information Form - Complete all information as requested. Attach the Abstract and Project Narrative as described in the following paragraphs.

Abstract and Project Narrative – The project abstract and narrative, whether submitted electronically or in hard copy, may be NO LONGER THAN 25 PAGES, ALL INCLUSIVE when printed out (*NOTE:* the SF 424 forms are not included in this 25-page limit).

- If printed for hard copy submission, the font is to be 10-12 point, on one-sided 8 $\frac{1}{2}$ x 11 inch white paper. . Other attachments separate from the abstract and narrative, such as institutional brochures or reprints, will not be accepted.
- If submitted electronically, all attachments to all Grants.gov forms must be submitted in PDF format (Adobe Portable Document Format). To convert attachments into PDF format, Grants.gov provides a list of PDF file converters at http://www.grants.gov/resources/download_software.jsp

Attach the proposal abstract to Field 6 on the SF-424 Research and Related Other Project Information form. Include a concise (not to exceed 300 words) abstract that describes the instrumentation requested and the research and research-related education that will be supported by that instrumentation. In the header of the abstract please include (if known) the program manager's name(s) and directorate to receive the proposal for consideration and evaluation. To assist in directing the proposal, please reference Section I for the list of research interests cited at the Agency website.

Attach the proposal narrative to Field 7 of the SF-424 Research and Related Other Project Information form. The narrative must be complete and self-contained to qualify for review. It must:

- Describe how the proposed instrumentation will:

a. enhance the quality of research and research-related education currently funded by the DoD (indicate the DoD organization, the contract or grant number, and the Principal Investigator; and concisely describe the thrust of the research and research-related education in sufficient detail to enable review of the proposal by an evaluator who is not familiar with your research program), and/or

b. contribute to research and research-related education currently proposed to the DoD (indicate the organization and Principal Investigator of the proposal under consideration, the prospective DoD sponsor; and concisely describe the thrust of the research and research-related education in sufficient detail to enable review of the DURIP proposal by an evaluator who is not familiar with your research proposal), and/or

- c. establish new research capabilities or enhance current research capabilities for performing research and research-related education in areas of interest to the DoD.
- Describe how the proposed instrumentation will interface with existing facilities or upgrade other instrumentation now available for research and research-related education.
- Describe the amounts and sources of ongoing or proposed support for the research and research-related education to be facilitated by the instrumentation.
- Describe any special circumstances regarding the acquisition or installation of the equipment.
- Indicate the estimated useful life of the equipment.
- Include curriculum vitae for the Principal Investigator and for other senior investigators, which will be counted as part of the 25 page limit.
- **SF-LLL Form, "Disclosure Form to Report Lobbying" -** If you have lobbying activities that you are required to disclose under 31 U.S.C. 1352, as implemented by the DoD at 32 CFR part 28, you also must complete the SF-LLL form in the downloaded ADOBE forms package at grants.gov.

SF-424 (R&R) Research and Related Project/Performance Site Location(s) Form – Complete all information as requested.

- 3. **Submission Dates and Times** Full proposals must be received no later than 4:00 PM Eastern Daylight Time on Tuesday, 26 August 2008, whether submitted electronically or in hard copy. Exceptions:
 - For electronic submission, should the site of Grants.gov not be operational on the due day and is unable to receive the proposal submission, the deadline is extended to the same time of the first day when the site is in operation.
 - For hard copy submission, in case the operation of a designated agency is interrupted and the agency is unable to receive the proposal, the deadline is extended to the same time of the first day when the agency is in operation.

Application Receipt Notices and Consequence of Late Submission - Details for electronic and hard copy submissions are as follows:

For electronic submission - The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted by the deadline. A proposal received after the deadline is "late" and will not be considered for an award. The applicant will receive an e-mail within a few hours of submission indicating that the proposal has been validated by Grants.gov. This means that all the required fields have been completed. (Please consider that the initial submission may be "confirmed" but the delay for the validation could be as long as a couple of hours.) The third notice the applicant will receive is an e-mail from the designated agency to which the electronic proposal was submitted, to acknowledge receipt of the proposal and provide the agency's assigned tracking number. The email is sent to the authorized representative for the applicant institution approximately ten days from the *proposal due date*.

For hard copy submission – An applicant that submits a hard copy proposal to one of the designated agencies will receive an e-mail from the agency approximately ten days after the proposal due date to acknowledge receipt of the proposal and provide the agency's assigned tracking number. The e-mail is sent to the authorized representative for the applicant institution. A hard copy proposal received at an agency's listed mailing address after the deadline is "late" and will not be considered for an award, except for cases in which there is acceptable evidence to establish that the proposal:

- a. Was delivered to the agency and was under the agency's control prior to the deadline; or
- b. Was sent to the agency's listed mailing address by U.S. Postal Service Express Mail three or more business days prior to the date specified for the receipt of the proposals. The term "business days" excludes weekends and U.S. federal holidays.

Both the electronic and hard copy proposers will be notified by letter or e-mail that the proposal has been received by the reviewing Agency.

- **4. Intergovernmental Review** Not applicable.
- **5. Funding Restrictions** Funds provided under DURIP may not be used for the construction or modification of buildings, building support systems (e.g. heating/ventilation/air conditioning, plumbing, and electrical), or fixed equipment (e.g. clean rooms and fume hoods). DURIP funds may not be requested or used for direct salaries of faculty, postdoctoral associates, or students. DURIP proposal budgets may include costs for design, construction, assembly, and/or installation of the equipment by an external contractor or by university technicians/engineers. Costs for continued operation

and maintenance, including extended warranties, are not eligible for funding within DURIP.

6. Other Submission Requirements –

Advanced Preparation For Electronic Submission - Electronic proposals must be submitted through Grants.gov. There are several one-time actions your organization must have completed before it will be able to submit applications through Grants.gov. Well before the DURIP submission deadline, you must verify that the persons authorized to submit proposals for your organization have completed those actions. If not, it may take up to **21 days** to complete the actions before being able to submit DURIP applications.

Should you have questions relating to the registration process, system requirements, how an application form works or the submittal process, call Grants.gov at 1-800-518-4726 or support@Grants.gov.

Submission to multiple agencies In some cases, proposed instrumentation and associated research may be relevant to more than one of the participating agencies. In such cases, proposers can request that a proposal be reviewed at more than one agency (but only one DURIP award will be made). To have the proposal reviewed by more than one Agency, proposals must be submitted directly to each reviewing agency.

For Electronic Submission –Note that if more than one agency will review the proposal, the SF 424 (R&R) may be saved and modified to indicate the updated agency and CFDA number to that agency. This requires up to three electronic submissions, one in response to the DURIP announcement posted at Grants.gov by each agency that will review the proposal, or three mailings of hard copies following the hard copy instructions below. As a reminder, only one DURIP award will be made.

For Hard Copy Submission – For hard copy submission, the original proposal and five (5) copies must be delivered to each of the reviewing agencies directly. Proposals submitted in whole or in part by electronic media (computer disk or tape, facsimile machine, electronic mail, etc.) will not be accepted (note, however, that the full proposal may be submitted through Grants.gov in accordance with the electronic submission instructions in this announcement). Mailing addresses for FY2009 DURIP proposals being submitted to the agencies are:

Use this address for commercial carriers for ARO: Use this address for U. S. mail

for ARO:

Army Research Office ATTN: AMSRD-ARL-RO-SG-SI (DURIP)

4300 South Miami Boulevard

Army Research Office ATTN: AMSRL-RO-RI DURIP

P. O. Box 12211

Research Triangle Park, NC 27709-2211

Office of Naval Research ATTN: DURIP/ONR 03R 875 North Randolph Street, Room 256A Arlington, VA 22203-1927

Air Force Office of Scientific Research ATTN: PIE/DURIP 875 North Randolph Street Suite 325, Room 3112 Arlington, VA 22203 -1768

V. Application Review Information

- **1. Criteria** The primary evaluation criteria, of equal importance, are:
 - a. The impact of the equipment on research currently funded by the DoD and/or the impact on research currently planned for DoD funding and/or the likelihood of the equipment to establish new research capabilities or to enhance current research capabilities that are relevant to DoD areas of research interest.
 - b. The scientific and technical merits and the relevance and potential contribution to DoD missions of the research to be supported by the proposed instrumentation.
 - c. The potential to enhance the institution's ability to educate, through the research to be conducted with the proposed equipment, future scientists and engineers in disciplines important to the DoD mission, thereby contributing to DoD research-related educational objectives.

Other evaluation criteria, which are of lesser importance than the primary criteria but of equal importance to each other, are:

- d. The past performance, experience, and qualifications of the institution to perform the research, and to operate and maintain the equipment proposed for purchase.
- e. The past performance, qualifications, and experience of the Principal Investigator and other key personnel to conduct research of interest to the DoD.
- f. Realism and reasonableness of cost. Cost sharing is not an evaluation factor.

- **2. Review and Selection Process** Proposals will undergo a multi-stage evaluation procedure. First, cognizant DoD research program managers and/or other technical experts will review proposals received in their technical areas. Second, the most significant proposals will be selected for funding by each agency based upon recommendations by the program managers and/or other technical experts. Third, the agencies, in coordination with the Office of the Deputy Under Secretary of Defense (Laboratories and Basic Sciences) will reconcile any overlap and coordinate complementary efforts so as to ensure the broadest possible impact with the funds available. Please note that proposals may be handled for administrative purposes by the agencies' support contractors.
- **3. Anticipated Announcement and Award Dates** Decisions are expected to be announced on or about 24 March 2009, via acceptance/declination letter or e-mail to the proposer. Awards are expected to be in place by 15 April 2009; this must be cited as the start date of the proposal and associated budget. Grants will be awarded by the participating agencies the Army Research Office, Office of Naval Research and Air Force Office of Scientific Research. Negotiations may result in funding levels less than proposed.

VI. Award Administration Information

- 1. Award Notices Successful proposers will receive a separate notice (acceptance letter or e-mail as indicated in V.3) stating that an application has been selected (before the award is in place). The notification letter or e-mail must not be regarded as an authorization to commit or expend funds (except at the recipient's own risk, to the extent that the recipient elects to charge up to 90 days of pre-award costs, as permitted under paragraph 32.25(d)(2)(i) of 32 CFR part 32). The Government is not obligated to provide any funding under a DURIP award until a Government Grants Officer signs the grant document. Negotiations may result in funding levels that are less than proposed.
- **2.** Administrative and National Policy Requirements In keeping with the provisions of 31 U.S.C. 6306 and with the intent of this program to increase university capabilities to conduct DoD-relevant research and research-related education, title to equipment will be vested with the university without further obligation to the government.

The Army, Navy, and Air Force administering agencies' requirements are available on-line at the following addresses:

ARO - http://www.aro.army.mil/research/terms99.htm Menu TAB select "For the Researcher"

ONR - http://www.onr.navy.mil/02/terms.htm.

AFOSR – http://www.wpafb.af.mil/shared/media/document/AFD-080228-008.PDF

- **3. Reporting** A financial report using the standard form SF-269 (or SF-272) is required by Part 32 of the DoD Grant and Agreement Regulations (32 CFR part 32). A final technical report is required, to indicate fulfillment of the proposed objective by the acquisition and use of the instrumentation.
- VII. Agency Contacts For questions concerning programmatic content, potential proposers are advised to contact DoD program managers listed in the Broad Agency Announcements cited in section I. For help with adminstrative questions or problems, points of contact at the three agencies are as follows:

Army Research Office: Army DURIP Program Manager

Phone: (919) 549-4234.

E-mail: aror.durip@us.army.mil

Office of Naval Research: Ms Paula Barden

Phone: (703) 696-4111 FAX: (703) 588-1013

E-mail: paula.barden.ctr@navy.mil

Air Force Office of Scientific Research: Ms Susan Mason

Phone: (703) 696-5944 FAX: (703) 696-7320

E-mail: susan.mason@afosr.af.mil

VIII. Other Information – None.